

Figure 1 displays 12 histograms showing the distribution of the number of non-zero elements in the vector  $x$  for different values of  $n$  (10 and 20) and  $m$  (10, 20, 30, 40, 50, 60). The histograms are arranged in a 6x2 grid. The columns are labeled 'n = 10' and 'n = 20'. The rows are labeled 'm = 10', 'm = 20', 'm = 30', 'm = 40', 'm = 50', and 'm = 60'. The x-axis for all histograms is 'Number of non-zero elements' ranging from 0 to 100. The y-axis is 'Frequency' ranging from 0 to 10. The distributions are roughly bell-shaped and centered around 50 for  $n=10$  and 100 for  $n=20$ .